FIG.1

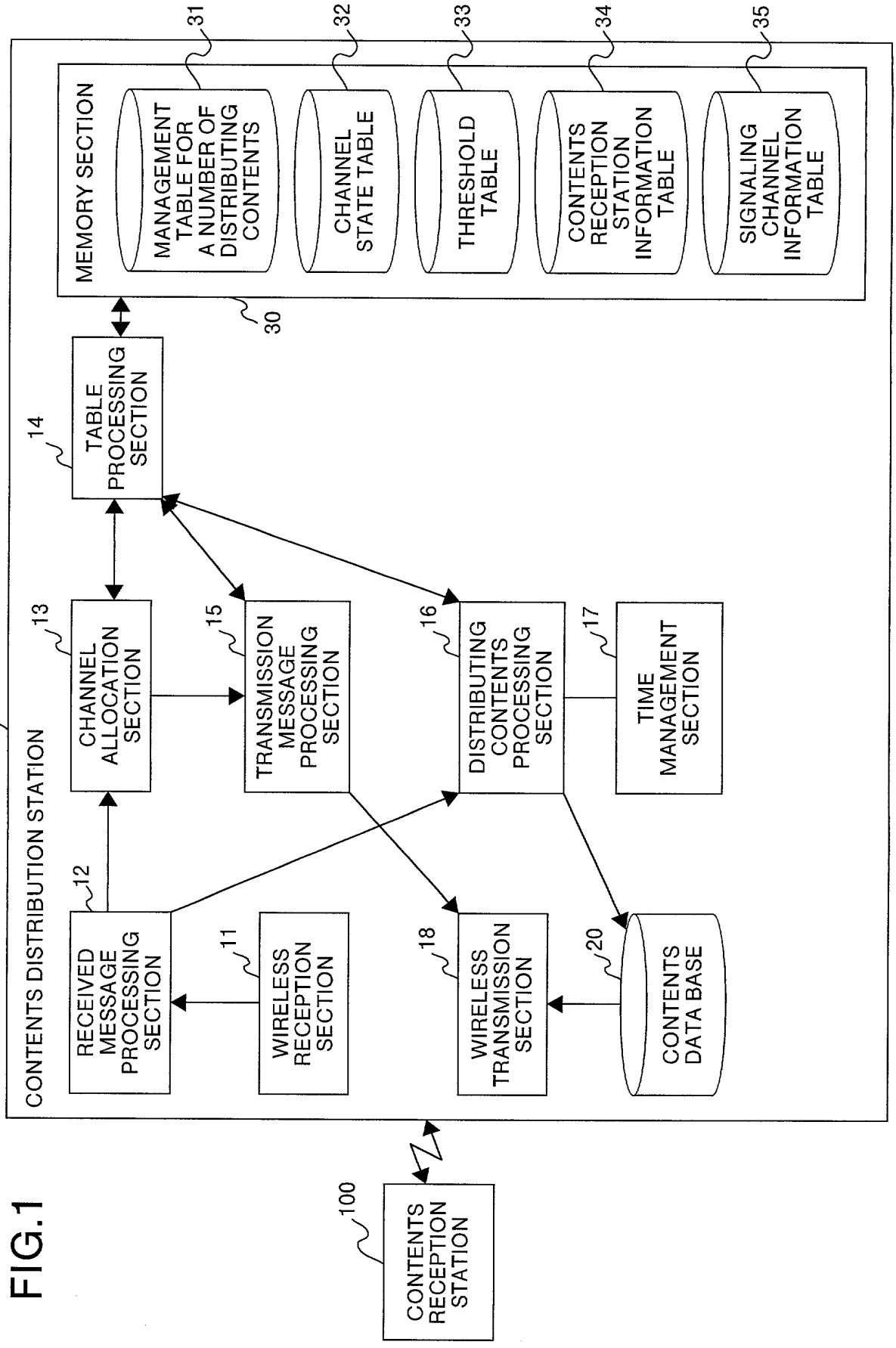

CONTENTS RECEPTION STATION
100
CONTENTS DISTRIBUTION STATION
200
RECEIVED MESSAGE PROCESSING SECTION
12
WIRELESS RECEPTION SECTION
11
CHANNEL ALLOCATION SECTION
13
TABLE PROCESSING SECTION
14
TRANSMISSION MESSAGE PROCESSING SECTION
15
DISTRIBUTING CONTENTS PROCESSING SECTION
16
TIME MANAGEMENT SECTION
17
WIRELESS TRANSMISSION SECTION
18
CONTENTS DATA BASE
20
MEMORY SECTION
30
MANAGEMENT TABLE FOR A NUMBER OF DISTRIBUTING CONTENTS
31
CHANNEL STATE TABLE
32
THRESHOLD TABLE
33
CONTENTS RECEPTION STATION INFORMATION TABLE
34
SIGNALING CHANNEL INFORMATION TABLE
35

FIG.2A

MANAGEMENT TABLE FOR A NUMBER OF DISTRIBUTING CONTENTS

CONTENTS NUMBER	NUMBER OF CONTENTS RECEPTION STATION FOR DISTRIBUTION	CHANNEL TYPE TO BE USED
⋮	⋮	⋮

FIG.2B

CHANNEL STATE TABLE

CHANNEL NUMBER	CHANNEL TYPE	CHANNEL USE STATE	CONTENTS NUMBER
⋮	⋮	⋮	⋮

FIG.2C

THRESHOLD TABLE

THRESHOLD TYPE	VALUE
UPPER LIMIT THRESHOLD	
LOWER LIMIT THRESHOLD	

FIG.2D

CONTENTS RECEPTION STATION INFORMATION TABLE

CONTENTS RECEPTION STATION NUMBER	CHANNEL NUMBER	STARTING TIME FOR CONTENTS DISTRIBUTION
⋮	⋮	⋮

FIG.2E

SIGNALING CHANNEL INFORMATION TABLE

CONTENTS RECEPTION STATION NUMBER	UP-LINK CHANNEL INFORMATION		DOWN-LINK CHANNEL INFORMATION	
	FREQUENCY	SLOT NUMBER	FREQUENCY	SLOT NUMBER
⋮	⋮	⋮	⋮	⋮

FIG.3

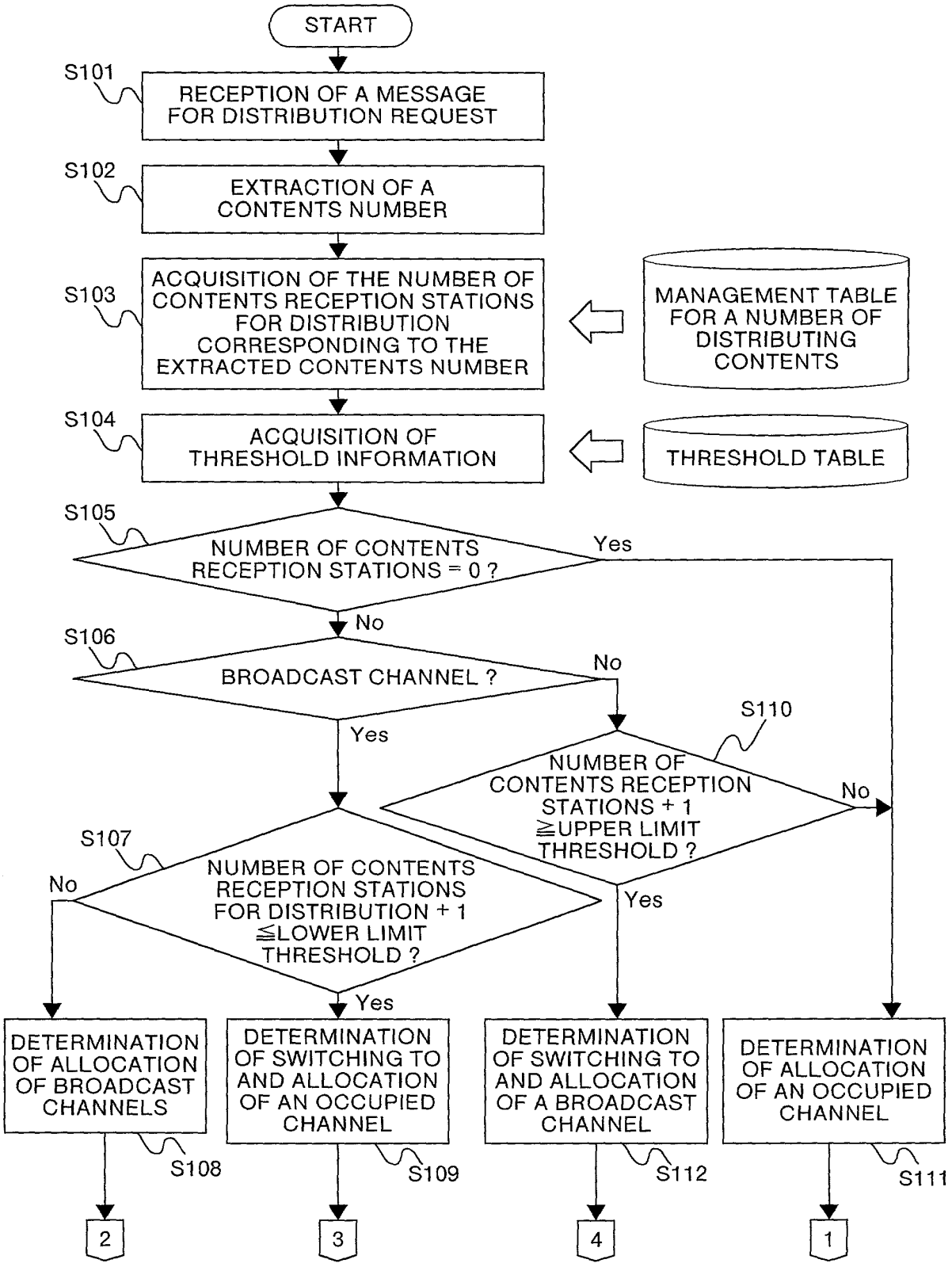

START
S101
RECEPTION OF A MESSAGE FOR DISTRIBUTION REQUEST
S102
EXTRACTION OF A CONTENTS NUMBER
S103
ACQUISITION OF THE NUMBER OF CONTENTS RECEPTION STATIONS FOR DISTRIBUTION CORRESPONDING TO THE EXTRACTED CONTENTS NUMBER
MANAGEMENT TABLE FOR A NUMBER OF DISTRIBUTING CONTENTS
S104
ACQUISITION OF THRESHOLD INFORMATION
THRESHOLD TABLE
S105
NUMBER OF CONTENTS RECEPTION STATIONS = 0 ?
Yes
No
S106
BROADCAST CHANNEL ?
No
Yes
S110
NUMBER OF CONTENTS RECEPTION STATIONS + 1 ≧UPPER LIMIT THRESHOLD ?
No
Yes
S107
NUMBER OF CONTENTS RECEPTION STATIONS FOR DISTRIBUTION + 1 ≦LOWER LIMIT THRESHOLD ?
No
Yes
DETERMINATION OF ALLOCATION OF BROADCAST CHANNELS
S108
DETERMINATION OF SWITCHING TO AND ALLOCATION OF AN OCCUPIED CHANNEL
S109
DETERMINATION OF SWITCHING TO AND ALLOCATION OF A BROADCAST CHANNEL
S112
DETERMINATION OF ALLOCATION OF AN OCCUPIED CHANNEL
S111
2
3
4
1

FIG.4

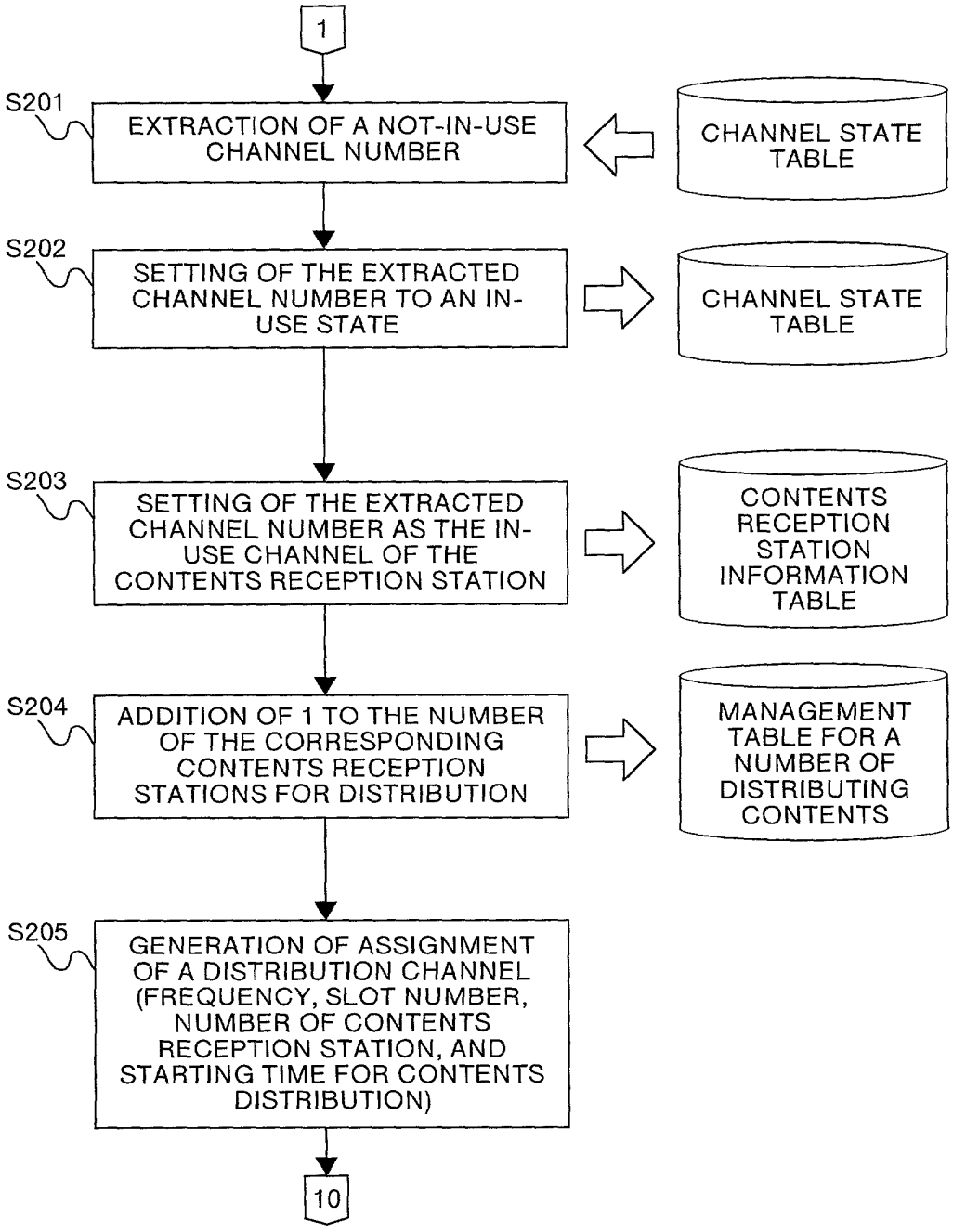

1
S201
EXTRACTION OF A NOT-IN-USE CHANNEL NUMBER
CHANNEL STATE TABLE
S202
SETTING OF THE EXTRACTED CHANNEL NUMBER TO AN IN-USE STATE
CHANNEL STATE TABLE
S203
SETTING OF THE EXTRACTED CHANNEL NUMBER AS THE IN-USE CHANNEL OF THE CONTENTS RECEPTION STATION
CONTENTS RECEPTION STATION INFORMATION TABLE
S204
ADDITION OF 1 TO THE NUMBER OF THE CORRESPONDING CONTENTS RECEPTION STATIONS FOR DISTRIBUTION
MANAGEMENT TABLE FOR A NUMBER OF DISTRIBUTING CONTENTS
S205
GENERATION OF ASSIGNMENT OF A DISTRIBUTION CHANNEL (FREQUENCY, SLOT NUMBER, NUMBER OF CONTENTS RECEPTION STATION, AND STARTING TIME FOR CONTENTS DISTRIBUTION)
10

FIG.5

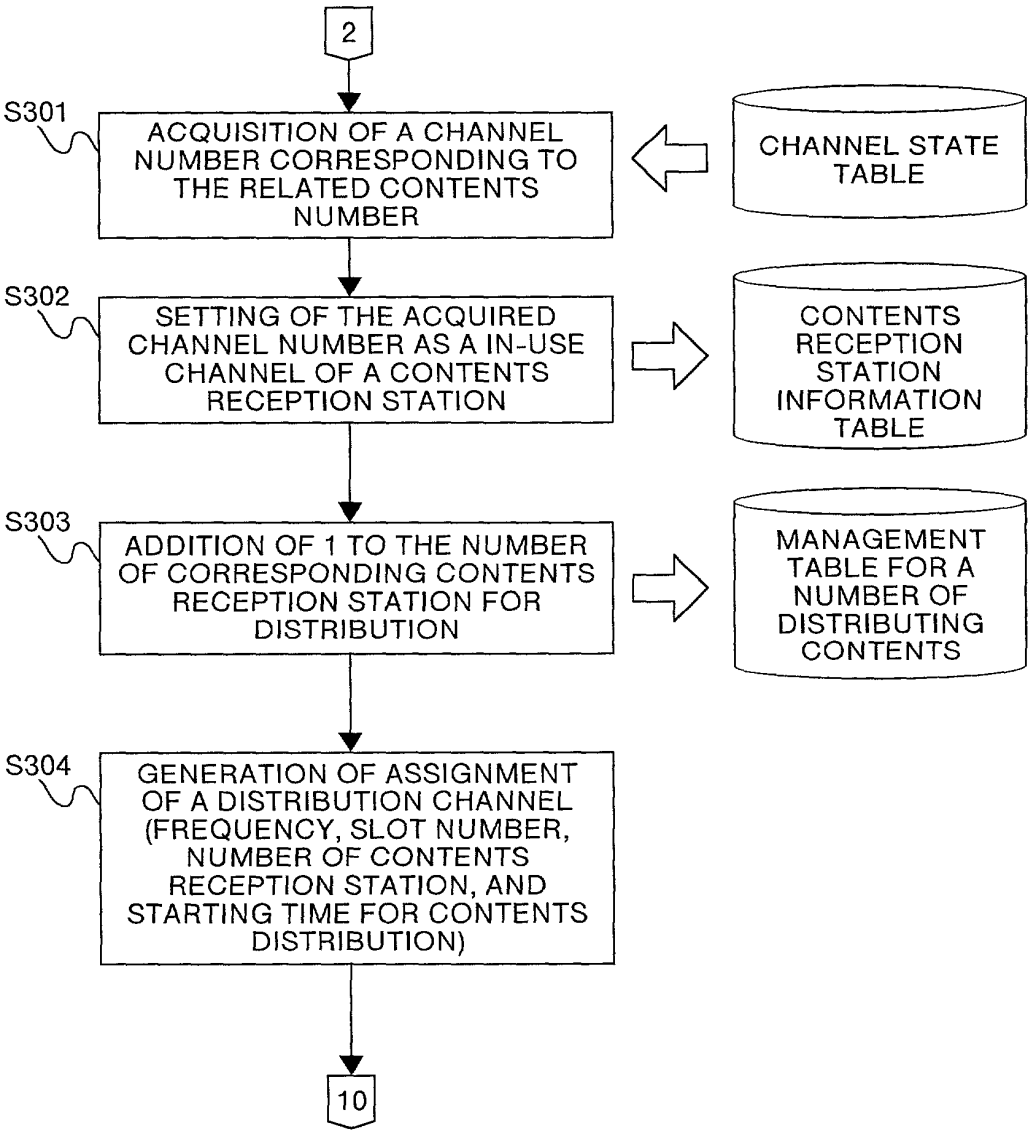

2
S301
ACQUISITION OF A CHANNEL NUMBER CORRESPONDING TO THE RELATED CONTENTS NUMBER
CHANNEL STATE TABLE
S302
SETTING OF THE ACQUIRED CHANNEL NUMBER AS A IN-USE CHANNEL OF A CONTENTS RECEPTION STATION
CONTENTS RECEPTION STATION INFORMATION TABLE
S303
ADDITION OF 1 TO THE NUMBER OF CORRESPONDING CONTENTS RECEPTION STATION FOR DISTRIBUTION
MANAGEMENT TABLE FOR A NUMBER OF DISTRIBUTING CONTENTS
S304
GENERATION OF ASSIGNMENT OF A DISTRIBUTION CHANNEL (FREQUENCY, SLOT NUMBER, NUMBER OF CONTENTS RECEPTION STATION, AND STARTING TIME FOR CONTENTS DISTRIBUTION)
10

FIG.6

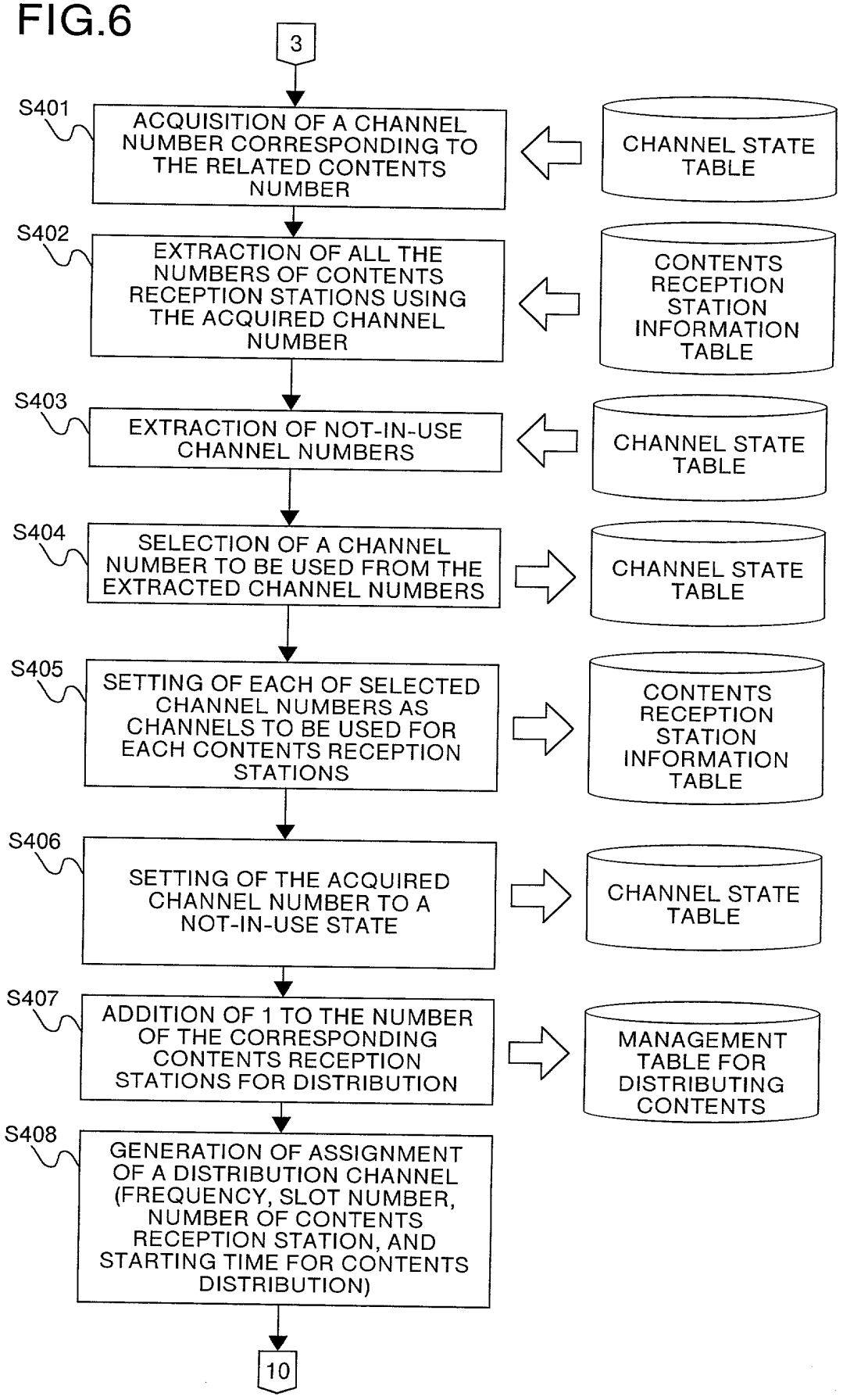

3
S401
ACQUISITION OF A CHANNEL NUMBER CORRESPONDING TO THE RELATED CONTENTS NUMBER
CHANNEL STATE TABLE
S402
EXTRACTION OF ALL THE NUMBERS OF CONTENTS RECEPTION STATIONS USING THE ACQUIRED CHANNEL NUMBER
CONTENTS RECEPTION STATION INFORMATION TABLE
S403
EXTRACTION OF NOT-IN-USE CHANNEL NUMBERS
CHANNEL STATE TABLE
S404
SELECTION OF A CHANNEL NUMBER TO BE USED FROM THE EXTRACTED CHANNEL NUMBERS
CHANNEL STATE TABLE
S405
SETTING OF EACH OF SELECTED CHANNEL NUMBERS AS CHANNELS TO BE USED FOR EACH CONTENTS RECEPTION STATIONS
CONTENTS RECEPTION STATION INFORMATION TABLE
S406
SETTING OF THE ACQUIRED CHANNEL NUMBER TO A NOT-IN-USE STATE
CHANNEL STATE TABLE
S407
ADDITION OF 1 TO THE NUMBER OF THE CORRESPONDING CONTENTS RECEPTION STATIONS FOR DISTRIBUTION
MANAGEMENT TABLE FOR DISTRIBUTING CONTENTS
S408
GENERATION OF ASSIGNMENT OF A DISTRIBUTION CHANNEL (FREQUENCY, SLOT NUMBER, NUMBER OF CONTENTS RECEPTION STATION, AND STARTING TIME FOR CONTENTS DISTRIBUTION)
10

FIG.7

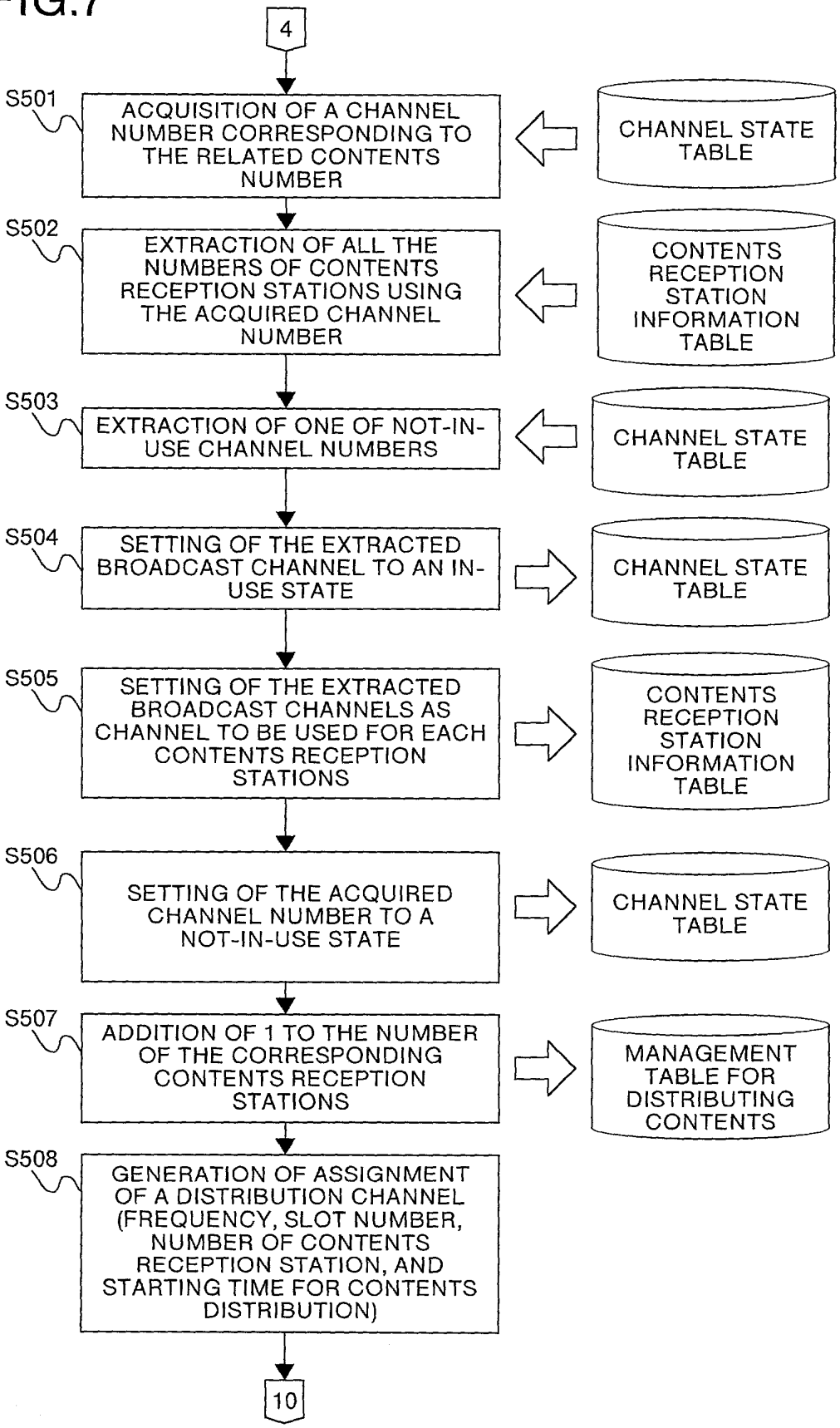

4
S501
ACQUISITION OF A CHANNEL NUMBER CORRESPONDING TO THE RELATED CONTENTS NUMBER
CHANNEL STATE TABLE
S502
EXTRACTION OF ALL THE NUMBERS OF CONTENTS RECEPTION STATIONS USING THE ACQUIRED CHANNEL NUMBER
CONTENTS RECEPTION STATION INFORMATION TABLE
S503
EXTRACTION OF ONE OF NOT-IN-USE CHANNEL NUMBERS
CHANNEL STATE TABLE
S504
SETTING OF THE EXTRACTED BROADCAST CHANNEL TO AN IN-USE STATE
CHANNEL STATE TABLE
S505
SETTING OF THE EXTRACTED BROADCAST CHANNELS AS CHANNEL TO BE USED FOR EACH CONTENTS RECEPTION STATIONS
CONTENTS RECEPTION STATION INFORMATION TABLE
S506
SETTING OF THE ACQUIRED CHANNEL NUMBER TO A NOT-IN-USE STATE
CHANNEL STATE TABLE
S507
ADDITION OF 1 TO THE NUMBER OF THE CORRESPONDING CONTENTS RECEPTION STATIONS
MANAGEMENT TABLE FOR DISTRIBUTING CONTENTS
S508
GENERATION OF ASSIGNMENT OF A DISTRIBUTION CHANNEL (FREQUENCY, SLOT NUMBER, NUMBER OF CONTENTS RECEPTION STATION, AND STARTING TIME FOR CONTENTS DISTRIBUTION)
10

FIG.8

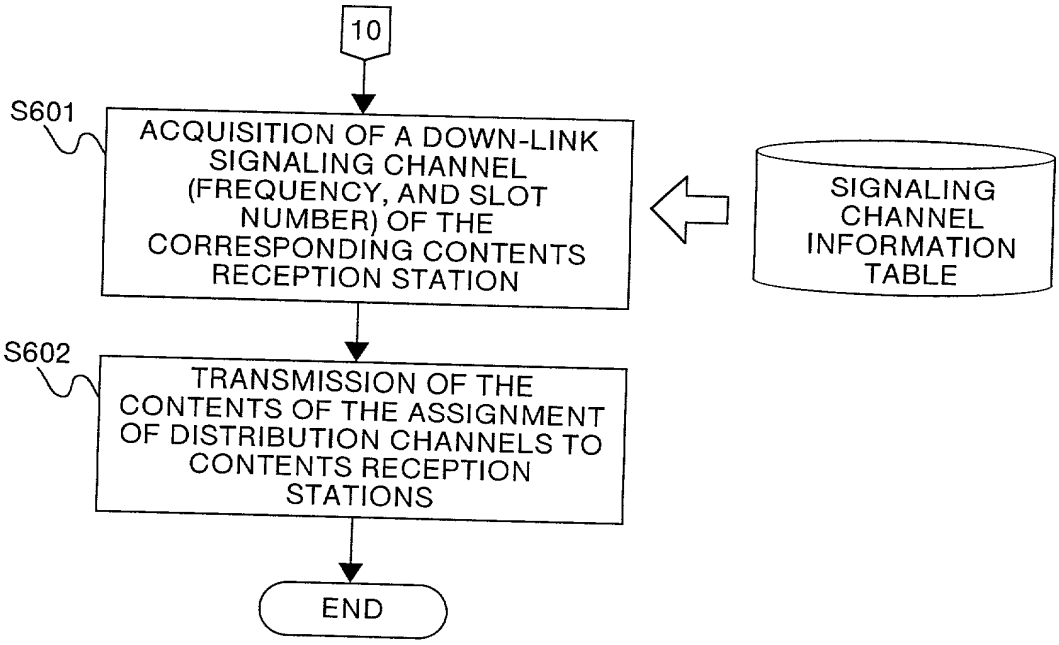

10
S601
ACQUISITION OF A DOWN-LINK SIGNALING CHANNEL (FREQUENCY, AND SLOT NUMBER) OF THE CORRESPONDING CONTENTS RECEPTION STATION
SIGNALING CHANNEL INFORMATION TABLE
S602
TRANSMISSION OF THE CONTENTS OF THE ASSIGNMENT OF DISTRIBUTION CHANNELS TO CONTENTS RECEPTION STATIONS
END

FIG.9

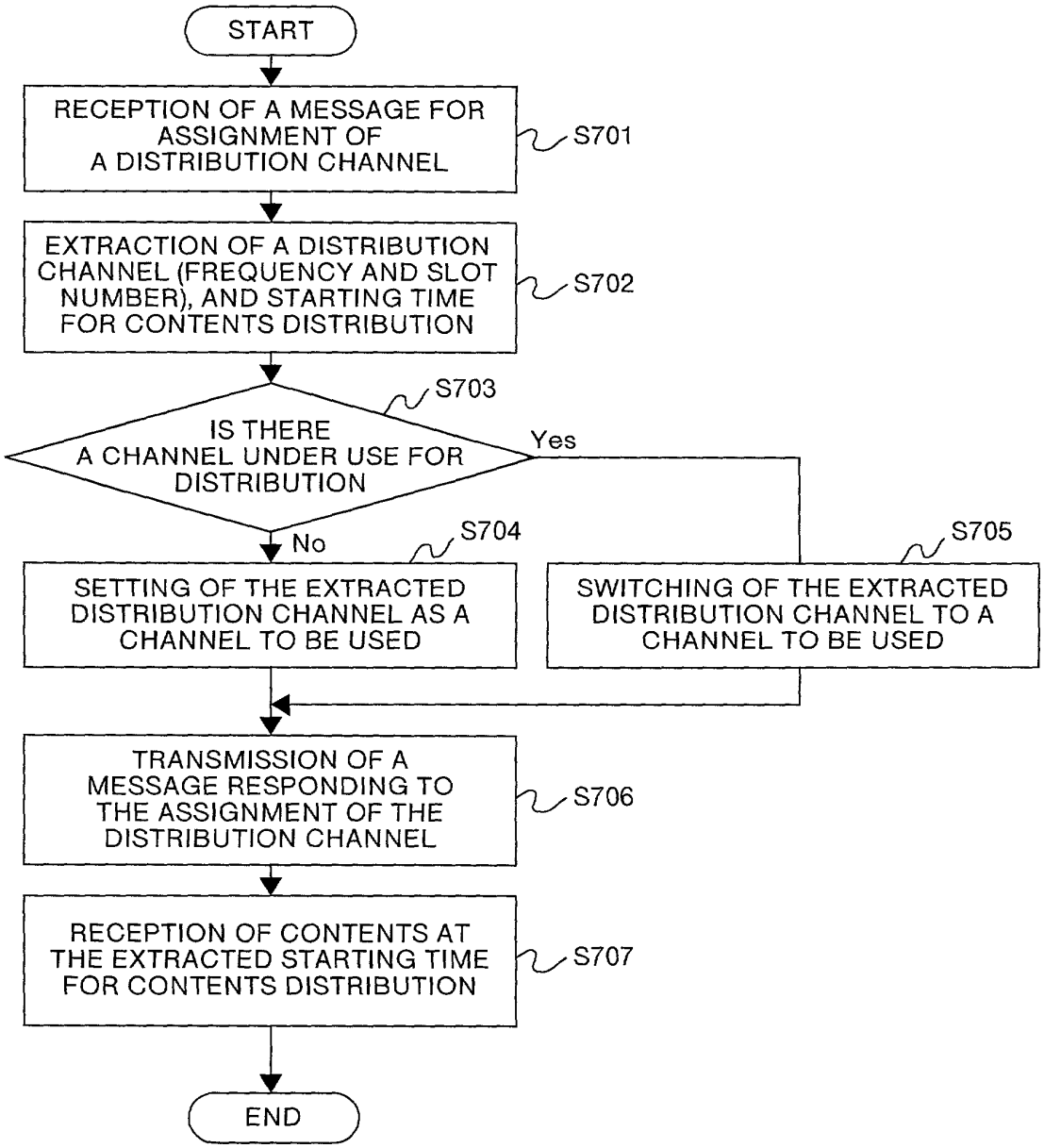
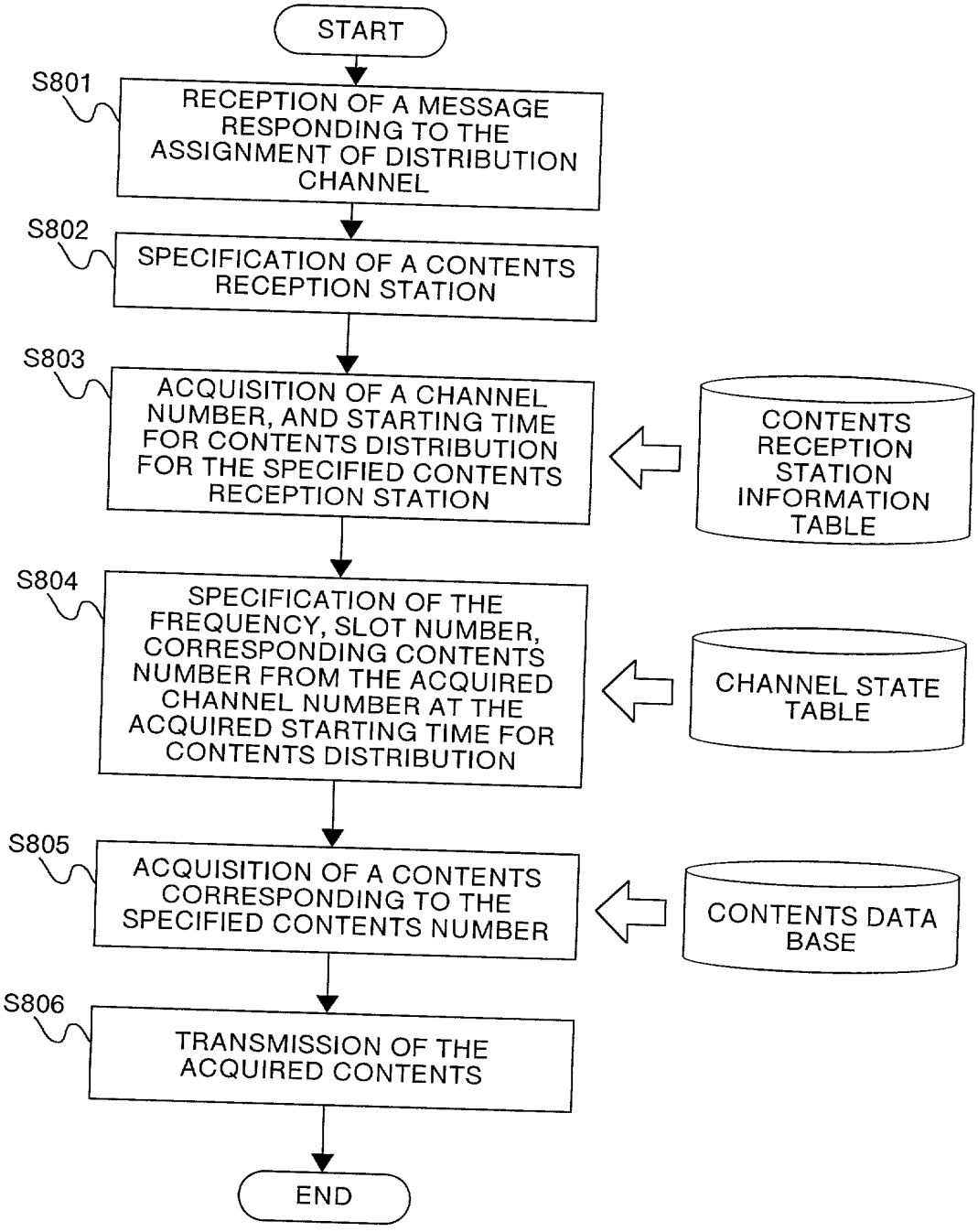

START
RECEPTION OF A MESSAGE FOR ASSIGNMENT OF A DISTRIBUTION CHANNEL
S701
EXTRACTION OF A DISTRIBUTION CHANNEL (FREQUENCY AND SLOT NUMBER), AND STARTING TIME FOR CONTENTS DISTRIBUTION
S702
S703
IS THERE A CHANNEL UNDER USE FOR DISTRIBUTION
Yes
No
S704
SETTING OF THE EXTRACTED DISTRIBUTION CHANNEL AS A CHANNEL TO BE USED
S705
SWITCHING OF THE EXTRACTED DISTRIBUTION CHANNEL TO A CHANNEL TO BE USED
TRANSMISSION OF A MESSAGE RESPONDING TO THE ASSIGNMENT OF THE DISTRIBUTION CHANNEL
S706
RECEPTION OF CONTENTS AT THE EXTRACTED STARTING TIME FOR CONTENTS DISTRIBUTION
S707
END

FIG.10


START
S801
RECEPTION OF A MESSAGE RESPONDING TO THE ASSIGNMENT OF DISTRIBUTION CHANNEL
S802
SPECIFICATION OF A CONTENTS RECEPTION STATION
S803
ACQUISITION OF A CHANNEL NUMBER, AND STARTING TIME FOR CONTENTS DISTRIBUTION FOR THE SPECIFIED CONTENTS RECEPTION STATION
CONTENTS RECEPTION STATION INFORMATION TABLE
S804
SPECIFICATION OF THE FREQUENCY, SLOT NUMBER, CORRESPONDING CONTENTS NUMBER FROM THE ACQUIRED CHANNEL NUMBER AT THE ACQUIRED STARTING TIME FOR CONTENTS DISTRIBUTION
CHANNEL STATE TABLE
S805
ACQUISITION OF A CONTENTS CORRESPONDING TO THE SPECIFIED CONTENTS NUMBER
CONTENTS DATA BASE
S806
TRANSMISSION OF THE ACQUIRED CONTENTS
END